BASICS II Country Report

ZAMBIA

COMMUNITY-BASED GROWTH PROMOTION PROGRAMMING

Developing the Tools for Systematic Expansion of Growth Promotion Activities in Zambia

BASICS II is a global child survival project funded by the Office of Health and Nutrition of the Bureau for Global Health of the U.S. Agency for International Development (USAID). BASICS II is conducted by the Partnership for Child Health Care, Inc., under contract no. HRN-C-00-99-00007-00. Partners are the Academy for Educational Development, John Snow, Inc., and Management Sciences for Health. Subcontractors include Emory University, The Johns Hopkins University, The Manoff Group, Inc., the Program for Appropriate Technology in Health, Save the Children Federation, Inc., and TSL.

Recommended Citation
BASIC II. *BASICS II Country Report: Zambia*. 2004. Published by the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington, Virginia, 2004.

USAID
U.S. Agency for International Development
Office of Health and Nutrition
Bureau for Global Health
Washington, DC
Website: www.usaid.gov/pop_health/

BASICS II
Basic Support for Institutionalizing Child Survival Project
Partnership for Child Health Care (PCHC), Inc.
Website: www.basics.org

BASICS II COUNTRY REPORT: ZAMBIA

CONTENTS

Figures and Tables

ACRONYMS

BASICS	Basic Support for Institutionalizing Child Survival
CBGP	Community-Based Growth Promotion
CBGMP	Community-Based Growth Monitoring and Promotion
CBOH	Central Board of Health
CHP	Child Health Promoter
DHMT	District Health Management Team
FAO	United Nations Food and Agriculture Organization
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
JICA	Japan International Cooperation Agency
MOH	Ministry of Health
NFNC	National Food and Nutrition Commission
NGO	Non-Governmental Organizations
PHN	Population, Health, and Nutrition
PLA	Participatory Learning for Action
SD	Standard Deviation
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
ZDHS	Zambia Demographic and Health Survey
ZIHP	Zambia Integrated Health Programme

COUNTRY MAP

xxvi | Map of Zambia

EXECUTIVE SUMMARY

In 1998, BASICS II (Basic Support for Institutionalizing Child Survival), the flagship child survival project funded by the United States Agency for International Development (USAID) helped launch new concepts of growth promotion programming in three communities in Kitwe. Each program covered less than half of the communities with populations from 20,000 to 25,000 and an estimated 1,200 to 1,800 children under two in each community. The new approach, community-based growth promotion (CBGP) differed in several important aspects from the long-standing National Nutrition Surveillance Programme carried out in Zambia since the 1970s. CBGP focuses on children under two years (not under five), monitors adequacy of growth (not nutritional status), is implemented within communities by teams of trained community volunteers (not health workers), focuses on prevention of malnutrition by taking action early when a child manifests slowed growth, and shares information regularly on the growth of the children with the community so the community can take action to solve problems related to child health.

After the BASICS project ended in early 1999 and a review of the Kitwe program conducted by the Zambia Integrated Health Programme (ZIHP—a USAID bilateral project) showed the CBGP program to have promise, CBGP was adopted and supported by donors and partners such as ZIHP, UNICEF, CARE, and Japan International Cooperation Agency (JICA) and expanded to different districts. However, there had been little coordination or guidance for the expansion, and concrete information on the scope of the expansion was lacking. It was also evident from visits to some program sites that not all implementers were aware of the concepts embodied in the new approach. The focus of the activities of USAID's next child survival project—BASICS II—was to help develop program elements that would facilitate a more systematic expansion that adhere to the core principles of CBGP.

Working closely with the National Food and Nutrition commission (NFNC) and ZIHP, BASICS II helped accomplish the following:

- The revision and finalization of a set of materials for training, implementation and monitoring of CBGP activities;
- The training of 28 trainers in CBGP, including master trainers who can be called upon to help train trainers in different parts of the country;
- The formation of a Growth Promotion (GP) Task Force formed to help disseminate information on CBGP among partners and learn from each other; and
- The development of an inventory of CBGP programs conducted by the NFNC to estimate the geographical scope and status of implementation of the CBGP program.

The inventory conducted in April 2003 and a qualitative study sponsored by ZIHP in June and August 2003 found that CBGP is being implemented in 16 districts in over 670 communities, though none of the districts is completely covered by the program. As suspected, not all the programs adhere to the key concepts of the approach, although there have been some local innovation of linking the program to other interventions such as

vitamin A distribution, food security issues, and the distribution of condoms to prevent the spread of Human Immunodeficiency Virus (HIV) and other sexually transmitted diseases. The CBGP program is generally welcomed by the communities, health workers, and caregivers who like the proximity of the program to their homes, with some reporting that they have improved their feeding practices due to their exposure to the program.

Lessons learned from the Zambia experience with CBGP include the following:

- CBGP is adaptable to Zambia and acceptable to key stakeholders that include donors, health workers, non-governmental organizations (NGOs), and communities;
- CBGP raises awareness of the importance of child growth in communities;
- CBGP is able to engender long-term commitment among volunteer child health promoters to offer their services; and
- CBGP encourages links with other interventions such as the promotion of treated bednets, food preservation, backyard gardening, condom distribution, and others

However, the program faces key challenges that need to be addressed for the program to achieve its full potential:

- Effective leadership and coordination are necessary to ensure systematic expansion that maintains quality, but this has been difficult due to limited resources in Zambia;
- More effective supervision is needed to support the volunteer child health promoters (CHPs) and help them strengthen the skills they acquire during their initial training; and
- More regular feedback is needed to encourage community commitment to the program and help solve problems.

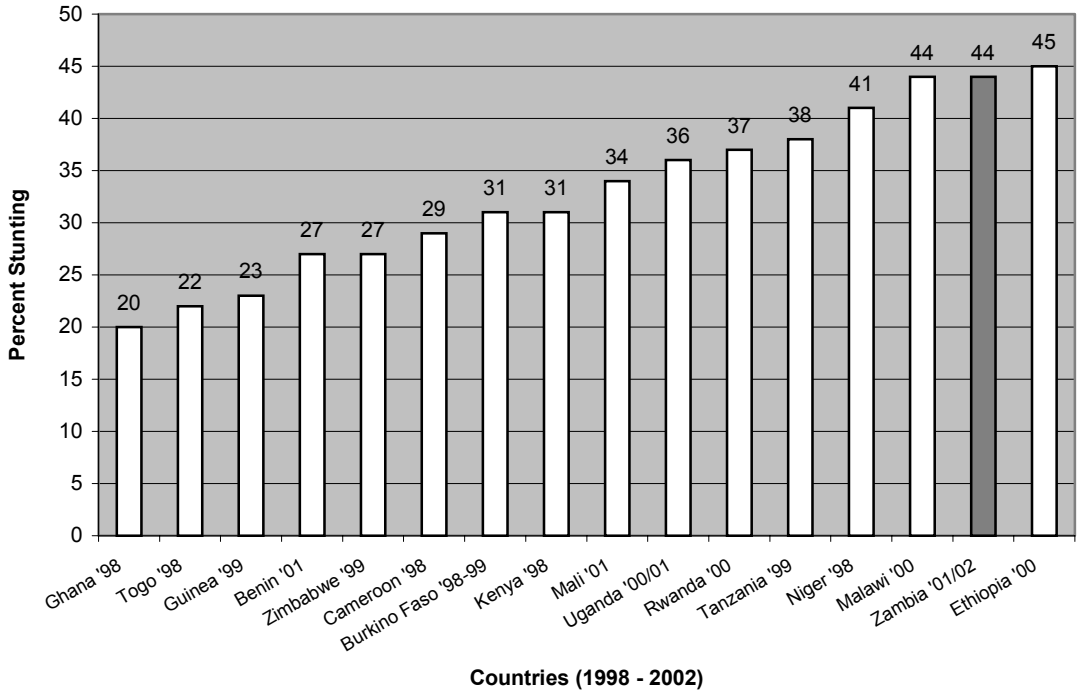
1. BACKGROUND

Child health and nutritional status of children under five years of age in Zambia

Zambia, a southern African country with a total population of about 10.3 million, is divided into nine administrative provinces and 72 districts. It has suffered economic decline since the 1970s with the fall in the price of copper, the country's main commodity and, within the past two decades, due to shocks from drought and the HIV/Acquired Immune Deficiency Syndrome (AIDS) epidemic. The most recent (2001-2002) Zambia Demographic and Health Survey (ZDHS) reported deaths among children under five to be 168 per 1,000, and deaths among children under one to be 95 per 1,000. Though these were declines from 197 and 109/1,000 respectively reported in 1996, the risk of a young child dying in Zambia is obviously still very high.

The ZDHS also reported that almost half (47%) of the children under five are stunted (low height for age), 28% underweight (low weight for age), and 5% wasted (low weight for height), showing a malnutrition rate among the highest in sub-Saharan Africa (Figure 1). With all levels of malnutrition estimated to contribute to up to 60% of deaths in young children dying from the common infectious diseases in developing countries (Pelletier et al. 1993), such levels of malnutrition undoubtedly contribute significantly to the high mortality in children under five. The prevention of malnutrition should thus be among priority child health interventions.

Figure 1. Stunting Among Children Under 3 Years in Zambia and Other Sub-Saharan African Countries



Factors Contributing to Poor Nutritional Status

To prevent malnutrition, the major factors that contribute to poor health and malnutrition in young children need to be addressed. These factors include inappropriate feeding practices, frequent illness and inadequate health care, poverty, and food insecurity, all of which interact and reinforce each other. Inappropriate feeding begins early: according to the ZDHS, while the initiation of breastfeeding is almost universal (98%) and the median duration of breastfeeding is long at 21 months, even in children under 2 months only 65% are exclusively breastfed, and this rate drops to 15% by age 4 to 5 months. The benefits of breastfeeding are thus reduced since most children under 6 months can thrive on breastmilk only, while many of the foods commonly fed in addition to breastmilk are dilute and of lower nutritional quality than the breastmilk. Beyond 6 months, poor complementary feeding continues with infrequent monotonous meals of low nutrient and energy density.

Illness often adversely affects a child's appetite and also puts a metabolic strain on the child's body. Frequent illness therefore predisposes the child to malnutrition, particularly when the child is not fed more to regain lost weight after an illness. The 2001-02 ZDHS reported a high incidence of illness in children: in the two weeks preceding the survey, 43% of children under five had been ill with fever and or convulsions, 15% had symptoms of acute respiratory infection, and about 20% had had diarrhea.

Poverty is also widespread in Zambia. The United Nations Development Programme (UNDP) ranks Zambia as one of the poorest countries in the world (153rd out of 173 countries). Poverty is common in both rural and urban settings—among the rural small-scale farmers and the large numbers of unemployed in the urban areas. The ability to buy food that is not grown by families is limited by the high levels of poverty, and frequent drought in the last decade has compounded the problem of food security

HIV/AIDS strikes men and women in their most productive years. The prevalence of HIV positivity is reported as 25% among adults ages 30-34 years and 17% among 15-49 year olds. The ZDHS 2001-02 reports HIV-positive prevalence of 11% in the rural areas and a 23% in urban areas. Over the past ten years, approximately 600,000 people have died from AIDS and approximately 1.0–1.2 people are currently living with HIV/AIDS. As a result, over 1 million children are orphans who have lost one or both parents. Thus a substantial number of households affected by AIDS either by the death of one or more of its members, caring for a chronically ill person, and/or taking in additional children have suffered significant loss of income and increased financial, emotional, and physical stress.

Community growth promotion programs are designed to directly address inappropriate feeding practices through individual counseling, educate caregivers on the prevention of common childhood illnesses, link up with immunization to prevent the immunizable diseases, encourage early care-seeking for illness, and work with mothers to reduce mother-to-child breastmilk transmission of HIV. While fundamental problems such as poverty and chronic food insecurity are beyond the immediate scope of CBGP, a program

can provide a platform for the community to analyze the causes for poor child growth and health and motivate action where this is possible.

Zambia Government Health Strategy and Health Reforms

In 1991, the government of Zambia embarked on reforms to achieve "quality of access to cost-effective quality health care close to the family as close as possible" (Ministry of Health (MOH)National Health Policies and Strategies, 1992). The vehicle for realizing this vision was through decentralization of health service delivery and funding to the district level. To concentrate resources on the most pressing conditions, the MOH formulated a Basic Health Package that consisting of interventions focused on malaria, HIV/AIDS, tuberculosis (TB), sexually transmitted infections (STIs), integrated reproductive health, child health and nutrition, mental and oral health, epidemics, hygiene, sanitation and safe water.

The strategy calls for the strengthening of health center and community partnerships, with the formation of neighborhood health committees to lead community efforts and also to liaise the health services and the community. Community-based growth promotion is among the strategies identified to address nutrition problems in children.

USAID Child Survival Program

USAID/Zambia has worked with other donors to support the government's health reforms. The USAID Country Strategic Plan for 1998-2002 included "Increased delivery of PHN [Population, Health, and Nutrition] interventions at the community level" as one of its intermediate results in the Results Framework. To achieve the desired results, USAID, through the first BASICS project, supported approaches such as the Participatory Learning Action (PLA) that assist communities to identify and plan interventions to solve their own health problems. Through the PLA approach, three peri-urban communities in Kitwe decided to implement community-based growth promotion activities to improve the nutrition status of their children. With technical support from BASICS, CBGP activities were introduced in three communities in Kitwe.

2. BASICS II TECHNICAL APPROACH

Rationale for BASICS II Approach

The BASICS II approach in Zambia was influenced by the status of the CBGP program in Zambia, the on-going involvement of other partners, and the limited available funding. After the close of BASICS in 1999, ZIHP has been the major implementer of child survival interventions within a package that includes HIV/AIDS, child health and nutrition, integrated reproductive health, and malaria programs. Before deciding to support the Kitwe CBGP program, ZIHP conducted a review of the program in December 1999 in order to assess its successes, failures, and lessons learned. The review showed that the CBGP program in Kitwe had been maintained largely through the efforts of the volunteer child health promoters and the through the interest of the caregivers who use it (Bhat et al.). From then on, ZIHP adopted the approach and subsequently launched it in seven of its 12 demonstration districts, working with NGOs and districts.

In 2000, other partners (UNICEF, PLAN International, CARE, JICA, and the United Nations Food and Agriculture Organization or FAO) also adopted and supported the implementation of the CBGP approach within their child health programs. By mid 2001, when BASICS II began planning activities in Zambia, there were believed to be perhaps as many as 90 communities implementing community-based child weighing programs, but not even the National Food and Nutrition Commission, the national body charged "to support the improvement of nutritional status of the population of Zambia…." knew the geographical scope for sure. NFNC staff members did communicate that visits to a few program sites had revealed that some CBGP program implementers did not even have the materials to work with, and in some cases were not practicing the CBGP concepts, such as individual counseling. The replication of the CBGP had been unsystematic, with little coordination among partners and inadequate preparation in some cases. Program managers were not always aware of the new concepts of CBGP and merely shifted the existing national growth monitoring model from the health center to implementation by community volunteers.

Focus of BASICS II Approach

The scope of BASICS II's approach was at the national level. Given the wide interest shown in Zambia for CBGP programming, which, however, outside of ZIHP lacked guidance for implementers to adhere to the principles of CBGP, the focus of BASICS II's involvement was to use the limited funding available to work at the national level to:

- Help build program elements that would facilitate a more systematic expansion of the CBGP program and would consist of:
    - Standard quality materials for planning, training, implementation and monitoring;
    - A team of well-trained trainers; and

- Strengthened national leadership capacity of the NFNC to coordinate and assist the districts and NGOs to plan, implemen,t and monitor the CBGP activities.

- Determine the scope and status of CBGP activities in the country to inform training and monitoring.

Community-Based Growth Promotion approach

The community-based growth promotion approach that BASICS II launched in Zambia in August 1998 (and is pursuing in a few other countries) differs in important aspects from the national child-weighing program practiced on a wide scale in Zambia. Since the 1970s and through the Ministry of Health, the government of Zambia has been implementing a National Nutrition Surveillance Programme that involves monthly weighing of children under five in clinics, in rural health centers, and during community outreach. While the "kit" for the National Nutrition Surveillance Programme mentions the need to identify growth faltering and take action to correct it (NFNC, 1984), little information is provided on how to take that action. Over the years the program focused on identifying children who are "below the lower line" (below minus 2 SD for weight-for-age) on the growth chart to provide them with a high-energy protein food supplement. The focus is thus on identifying the already malnourished rather than preventing malnutrition, and care-givers whose children do not fall "below the lower line" receive little attention or incentives to keep their children healthy.

In contrast the key concepts of the CBGP approach introduced by BASICS II include the following:

- Regular child weighing and counseling conducted in the community by teams of trained community members;
- A focus on reaching all children under two years, the children most vulnerable to malnutrition;
- The monitoring of *adequacy of growth*, rather than nutrition status;
- Individualized, targeted, negotiated counseling to encourage changes in behavior instead of group education;
- Training based on skills development and not mostly on imparting information; and
- Strong involvement of the community to innovate and use the information on child growth to find the causes and solutions to poor child health.

3. BASICS II ACCOMPLISHMENTS

Leadership role for the NFNC strengthened

With BASICS II support, the NFNC staff took the lead in the following actions to coordinate CBGP activities:

- Formation of a Task Force on Growth Promotion and initiation of coordinating meetings among partners;
- Revision with partners of the growth promotion materials for training and implementation;
- Organization of orientation sessions for districts and NGOs interested in CBGP to raise awareness of the principles of CBGP, and possible incorporation of the concepts in the nursing school curriculum; and
- Organization and hosting of a workshop on CBGP for Zambian and international participants.

Characteristics of CBGP and guidelines for planning and budgeting disseminated

In August 2003 a segment on CBGP (see Annex 1) was included in the 2004 Guidelines for District Planning that is disseminated by the Central Board of Health

A set of CBGP materials for planning, training, and implementation and monitoring revised and finalized

The following CBGP materials were revised or adapted for Zambia: Manual for Community Child Health Promoters in Zambia, Guide for Training the Trainers of Child Health Promoters, Guide for Training Child Health Promoters, Growth Promotion Counseling Cards, Promoting Adequate Growth in Zambian Children - Guidelines for Developing an Effective Growth Promotion Programme. By the close of BASICS II activities, UNICEF was expected to help print the materials.

A team of trainers from provincial to health center levels trained

Eight trainers from NFNC, ZIHP, provincial and district levels were trained by BASICS II as trainers of trainers in CBGP. These trainers in turn trained 20 trainers from five districts as trainers of CHPs. There is now a network of trainers from NFNC at the central level to provincial, district, and health center levels who are adequately trained to help expand CBGP more in tune with its principles.

Information collected on the status of CBGP implementation

The following information on the geographical scope and status of CBGP activities was collected in two ways: (1) an inventory of CBGP activities conducted by the NFNC with support from BASICS II, and (2) by a consultant hired by ZIHP to conduct a qualitative study in three of the districts supported by ZIHP.

Availability of CBGP activities

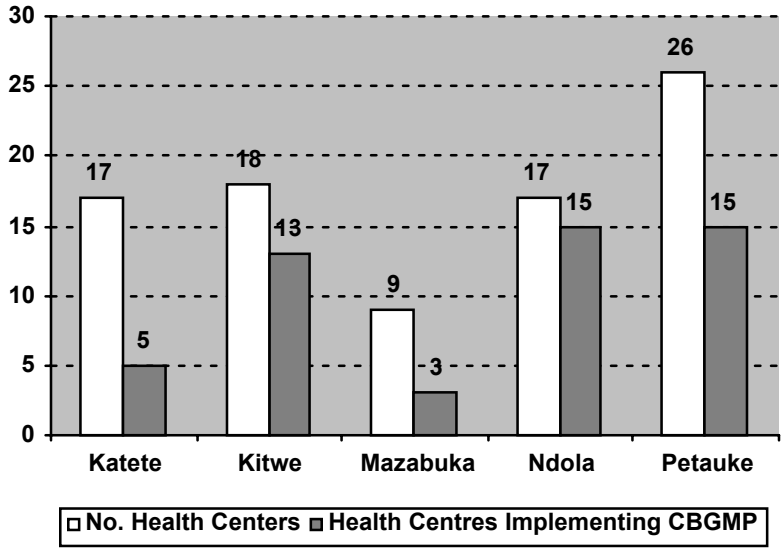
Community-based growth promotion activities are being conducted in more than 600 communities in at least 16 districts (Table 1). The major sponsors are ZIHP, CARE, PLAN International, JICA, FAO and the District Health Management Teams (DHMTs). In a few cases, local non-governmental organizations (NGOs) are the lead implementers and first level supervisors, such as the Catholic Diocese in Kasama District and Hossana in Ndola.

Table 1. Summary of CBGP in the Districts, Zambia

District	Number of sites	Population under two	Total CHPs Trained	Total CHPs active	Sponsoring and Implementing organization
Kitwe	54	9,897	197	170	ZIHP, DHMT
Ndola	108	26,504	813	700	ZIHP, CARE, HOSSANA, DHMT
Mwense	5	1,071	22	21	ZIHP, UNICEF, FAO, DHMT (ZIHP data only)
Samfya	4	1,4325	22	21	ZIHP, DHMT
Kawambwa	(no data received)				UNICEF, FAO, DHMT
Kasama	160	4,2058	671	666	ZIHP, CARE, Kasama Archdiocese, DHMT
Mbala	(no data received)	12,922			UNICEF, DHMT
Luwingu	(no data received)	6,669			UNICEF, DHMT
Mazabuka	81	23,179	238	134	PLAN, DHMT
Monze	15	1,807	64	56	UNICEF, DHMT
Kabwe	6	15,328	24	24	ZIHP, DHMT
Chibombo	21	19,390	25	25	ZIHP, DHMT
Petauke	15	2,820	61	59	UNICEF, DHMT
Katete	15	1,245	45	45	UNICEF, DHMT
Lusaka	169	85,781	928	857	JICA, CARE, DHMT
Kalabo	No data Received				UNICEF, DHMT

None of the districts is completely covered with CBGP activities (Figure 2). Even at the health center level, varying proportions of the catchment area population are covered. For example, in Luangwa, a densely populated area in Kitwe District, four out of the 10 neighborhood health zones are covered by CBGP activities. The district staff in Kitwe encourages the caregivers from one zone to attend the CBGP activities in another, thus violating the concept of a strong local community involvement. The recommended approach would be to assist each interested neighborhood health zone to organize the growth promotion activities for the estimated 200 children in the zone.

Figure 2. Number of Health Centers Implementing CBGMP in Five Districts



Community involvement

In contrast to situations where one local community uses the CBGP services in another community, there are communities with a strong sense of ownership of the CBGP program. In parts of Kasama District, for example, shelters for holding the CBGP sessions are built by the communities, monthly CBGP sessions are announced in advance in church, and community leaders actively encourage caregivers to take their children for weighing and counseling, and monitor the attendance. (Boggs, 2003).

Focus on children under two

While all the trained CHPs are aware that CBGP is to focus on children under two years, out of 12 sites in six districts that were observed, only a third of the sites limited the participating children to those under two (NFNC, 2003). Some CHPs say they cannot turn children away, or that immunizations are carried out during CBGP sessions and mothers bring all their children under five for it. Some health workers are also reluctant to change the long-standing practice of targeting all children under five for monthly weighing. The result of this lack of age focus is that some weighing sessions are very crowded, and individual counseling is impossible.

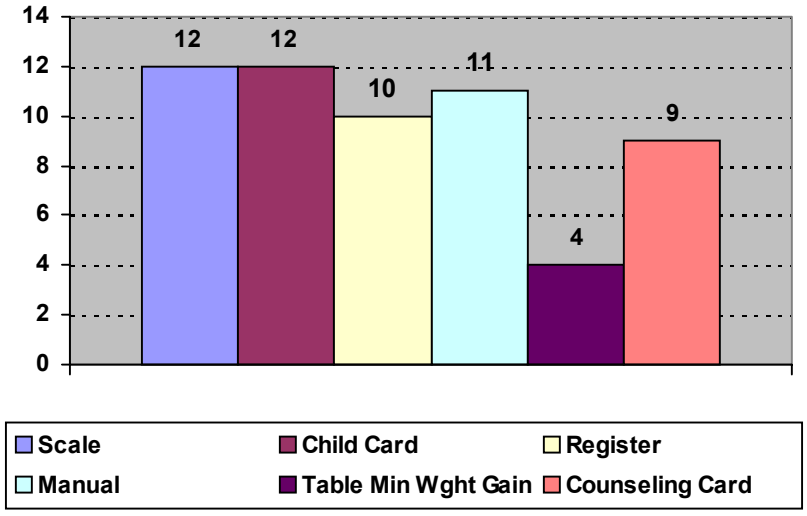
Counseling

Only in ZIHP-supported areas were CHPs observed to use counseling cards to guide their discussions with the mother; even then the recommended negotiation with the mother to reach an agreement on what she can do to improve the care and feeding of the child often did not occur (NFNC, 2003; Boggs, 2003).

Availability of tools and supplies

All 12 sites observed in six districts visited by NFNC had weighing scales and children's health cards, but some did not have the tools considered important in carrying out and monitoring CBGP activities as intended (Figure 3). For example, only four out of the 12 sites had the Minimum Weight Gain table (a tool designed to assist the determination of whether or a child has gained adequate weight since last seen one or two months previously); three out of four sites had counseling cards, and 10 had growth promotion registers. The registers provide essential information on the child growth trends and the performance of the program.

Figure 3. Supplies Available in 12 CBGMP Sites

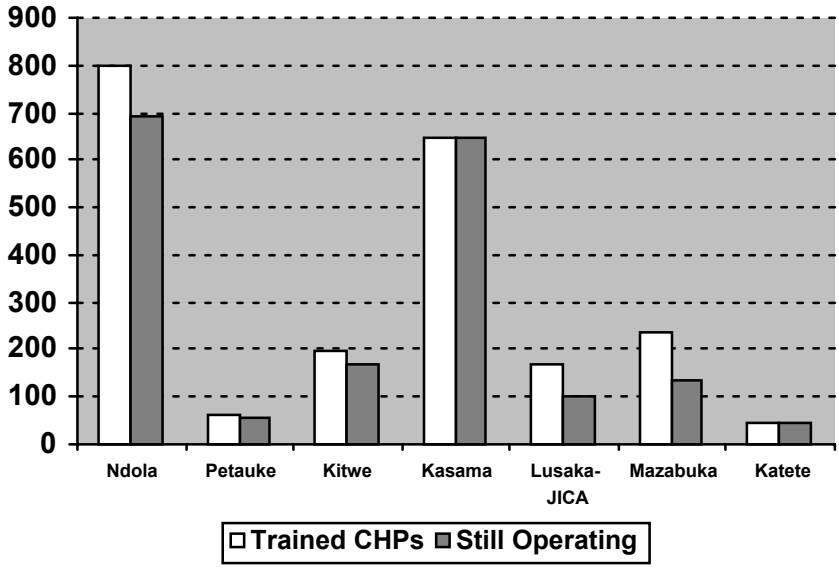


Retention of CHPs

The CHPs have displayed a high level of commitment to serving in the CBGP activities. The information collected during the inventory districts show that only about 10% of the 3,046 trained since 1998 have dropped out. Figure 4 shows the retention pattern for seven districts which have trained more than 40 CHPs over a period extending from 1998 (Kitwe and Ndola) to 2002 (Mazabuka).

The reported reasons for drop-out include people losing interest, moving away from the area, illness, death, or unknown. The relatively low drop-out rate is remarkable given the time commitment expected from the CHPs. Because of the high ratio of children to CHPs, most sites have two or more sessions per month (see Annex 1). As one informant

Figure 4. Numbers of CHPs Trained, and Still Active, by District



remarked, there are "too many children for too few CHPs" (Boggs, 2003). Many CHPs do admit that they would like some rewards, such as refresher courses or allowances. There is indication that the enthusiasm of some of the longer-serving CHPs is waning as revealed in the quotes below by two Kitwe CHPs:

> *But [work as a CHP] it's not OK this time. We are facing many problems [and] we work without any [pay]… But it is not good because it is…it very long for volunteer work….*
>
> *Some of us [CHPs] are widows… keeping our children who are orphans, our grandchildren who are also orphans as their mothers are dead. Now the problem is facing it financially, where we can get finance to start a small business to keep our lives our own, to keep our children, school fees, even food, clothing…We have no other source of income….*

Health worker performance

Heath workers generally say that they visit the growth promoters during growth promotion sessions about once a month, although some admit that they are not able to provide as frequent supervision due to pressure of other work. It is likely that supervisory visits are quite infrequent in some locations. As one informant remarked:

> *The other problem is that the health center staff do not visit the sites. The CHPs complain that they do not even participate in their meetings. This is due to shortage of staff in the district* (Boggs, 2003).

Health workers sometimes displayed lack of knowledge of the core principles of CBGP. For example, 14 out of the 18 health workers interviewed during the inventory said that nutritional status [instead of growth] is monitored monthly.

Caregivers' response to CBGP and self-reported changes in behavior

Most caregivers interviewed in the qualitative study cited the desire to keep their children healthy as the reason for taking part in CBGP activities. Most are able to cite their children's current weight, and whether or not the child gained weight in the last weighing session, a welcome observation in Zambian villages. They generally like the proximity of the service to their homes and like interacting with the CHPs better than with the health workers, who used to weigh their children.

Caregivers reported some optimal practices they have adopted:

> *[My daughter] only takes breastmilk. She will be on breastmilk until she is six months.*
>
> *I have really changed the way I used to feed her. I even saw the difference when her weight increased this month. I now breastfeed Joyce six times during the day and not three times as I used to especially when she is crying….*

Impact

In the absence of a formal quantitative evaluation of the program, information on the impact of the program is mostly anecdotal. Health workers report that the CBGP program has helped "decongest" the health centers. One health worker observed:

> *And even at the health center levels you find that [the] workload for members of staff is not so much. They'll [caregivers] only go to [the] Health Centre if there is need, if [the] child is sick or due for immunization.*

Community members themselves perceive an impact on the health and nutrition of the children. Two community members remarked:

> *And this time, even if you ask community leaders...the level of malnutrition has decreased compared to the time before the program was introduced.*
>
> *In the past, before the program started, there were children dying in the community than it is now. Children are able to grow healthy.*

There are some district data that indicate increases in immunization and numbers of children gaining weight in participating communities. In the Mindolo area of the Kitwe District, for example, the district reports the percentage of fully immunized children

under one year to have increased from 86% in 1997 (before the program start-up) to 91% in 2001. This could perhaps reflect the fact that when the CBGP program started in Kitwe, the DHMT made it a point of having vaccinations available at many of the CBGP sessions to take advantage of the large number of children gathered for the sessions.

In Kasama District, program data suggest that a higher number of children are gaining adequate weight monthly. For example, after a year of implementation In the Lubushi area, the number of children under two gaining adequate weight monthly is reported to have increased from 59% to 83% (Boggs, 2003).

Country program managed through contracts with NFNC

Having only a very limited budget, BASICS II did not set up an office or have paid personnel in Zambia, but funded and provided technical assistance through contracts with the National Food and Nutrition Commission (see implementation details in next section).

4. IMPLEMENTATION DETAILS AND MILESTONES

In order to decide on the priorities to address in the program start up, BASICS II consulted with its partners (ZIHP, Central Board of Health (CBOH), and the USAID/Zambia Mission) on how to best support child survival activities in Zambia. It was decided that CBGP, which had been introduced towards the end of the first BASICS project, would be an appropriate intervention to support. Table 2 depicts the evolution of BASICS II CBGP activities in Zambia.

Table 2. Evolution of the BASICS II Program in Zambia

Month/Year	Event
May 2000	BASICS II CTO discusses Zambia with BASICS II team. Discussion centers on history and lessons learned from the GP program initiated by BASICS I in Kitwe, Zambia. Conclusion is to explore further with the mission and ZIHP whether there is interest in developing the GP program further and how it would be managed. Memo is sent to the Mission.
Oct/Nov 2000	In Zambia, BASICS II staff member explores the feasibility of replicating the GP program initiated in Kitwe and learns that the CBGP program is already being replicated by UNICEF and other partners. However, replication is not well coordinated nor program principles followed. After discussions with USAID/Zambia, CBOH, ZIHP, and at BASICS II, CBGP is selected as the most appropriate intervention for BASICS II to support through collaboration with ZIHP, which is expanding CBGP activities to several districts.
2001	Revision and adaptation of CBGP materials begin in collaboration with ZIHP. Progress is slow, as is disbursement of funds.
June-July 2001	USAID/Zambia asks to de-obligate the funds given to BASICS II since it needs the funds for printing other materials produced by ZIHP. BASICS II suggests using some of the funds to support Zambia's participation in international GP course to be held in Zambia, and for building the blocks for systematizing the expansion of CBGP activities. BASICS II receives erroneous information that USAID/Zambia no longer is requesting for the funds. BASICS II prepares to program fully the field support.
June- October 2001	BASICS II and ZIHP prepare to hold the international GP course in Zambia in October 2001. Travel is suspended [due to terrorist attacks in the US] and the GP course is postponed to be rescheduled after travel resumes
July to November 2001	BASICS II and ZIHP exchange their annual workplans to determine how best BASICS II can contribute to ZIHP work and also to BASICS II global agenda.
November 30, 2001	A surprise (to BASICS II) message again from USAID/Zambia mission asking how best to retrieve the field support funds for use in Zambia
December 2001	BASICS II CTO discusses the mission request with project team and suggests that the project continue discussion of the matter with ZIHP and USAID/Zambia mission.
Dec 20-21, 2001	Latest draft versions of CBGP materials are received from ZIHP. ZIHP proposes April or May for the postponed CBGP course so as to avoid rainy season. The CBGP course is set for May.
January 2002	After discussions ZIHP and the Mission, an agreement is reached for BASICS II to keep part of the funds for CBGP and return the rest to Mission to print child survival materials produced by ZIHP.

February 2002	BASICS II explores setting up an office in Zambia either within or outside ZIHP premises. Decides instead to work closely with NFNC to save money and build up NFNC capacity to coordinate CBGP activities.
April 2002	First subcontract with NFNC is signed to organize course on CBGP key concepts for international participants.
May 2002	One-week course on CBGP key concepts is held in Zambia. Final agreement on use of funds is reached with USAID during the Zambia visit.
May 2002	CBGP activities to be supported by BASICS II planned with NFNC and partners (ZIHP and UNICEF).
April/May 2002	Inventory of CBGP activities is conducted.
June 2002	Contract with NFNC is extended to August 31 2003. BASICS II trains master trainers followed by training of trainers by the master trainers.
November 2002	Second contract with NFNC is signed to continue work on CBGP materials, conduct an inventory and the training of master trainers course.
May-June 2003 and August 2003	ZIHP funds and conducts qualitative review of CBGP activities in 3 districts (with NFNC participation).
August 2003	Revision of CBGP materials completed.
August 2003	CBGP Planning and Implementation guidelines developed with ZIHP and included in CBOH 2004 District Planning Guidelines.

Key implementation milestones

Selection of key implementation partner

BASICS II reached an agreement with USAID/Zambia at the end of 2001 to use the available funds to help develop CBGP program components towards a more systematic expansion of the CBGP activities then being expanded in Zambia. BASICS II initially intended to work primarily through ZIHP, which itself was replicating CBGP in several districts. Through much of 2001, the project collaborated with ZIHP nutrition staff in reviewing existing CBGP materials and revising them as indicated. When this process proved rather slow partly because of the heavy workload of the ZIHP staff and frequent travel to the field, BASICS II considered the possibility of having its own staff in country. However, after exploring this option in country, it was evident that for reasons of cost, logistics, and the desirability of building in-country leadership skills to guide CBGP activities, it would be more productive for the project to provide technical assistance to NFNC to take the responsibility for implementing activities agreed on with BASICS II. It was decided that a subcontracting with NFNC for specific products would be the best mechanism for the BASICS II-NFNC collaboration. NFNC, which had just assigned a staff member to be the CBGP coordinator, agreed to have the coordinator be the focal person to work with the project and other NFNC staff persons to participate as needed.

A course on the key concepts of CBGP

The first contract BASICS II signed with NFNC was to provide technical assistance to organize a one-week workshop for a course on the key concepts of CBGP. Participants

from other African countries interested in CBGP came from Uganda, Ghana, Eritrea, and Senegal. The October 2001 date set for the conference had to be postponed because of the terrorist attacks in September in the United States. The workshop was rescheduled and held in May 2002. It was the first time key Zambia partners in CBGP had come together to discuss the CBGP. The course was well-received and Zambian participants confirmed NFNC role as a coordinator for CBGP programs. A Task Force for CBGP was formed then by the Zambian participants to be led by NFNC, which planned to hold coordinating meetings for the partners.

Revising and adapting a set of materials for CBGP activities

One requirement for a systematic expansion and maintenance of the quality of CBGP activities is to have standardized quality materials and tools that are accessible to those implementing the CBGP program. At the start-up of BASICS II involvement in Zambia in 2000, existing materials included a manual for child health promoters, a draft training guide for the training of CHPs, and counseling cards. During 2001, BASICS II collaborated with ZIHP to adapt a training of trainers guide and an implementation guide used in other countries. In November 2002, a second subcontract signed with NFNC covered the ongoing revision and adaptation of the set of CBGP materials, an inventory of CBGP activities in the country, and the training of "master trainers" who would be available nationally to train trainers of CHPs.

BASICS II guided the development of the materials by reviewing drafts and making suggestions to NFNC on the existing drafts. For example, the project helped reduce the amount of theory and information in the training guides and placed a greater emphasis on building the skills for the expected CBGP tasks. Work on the materials continued until after the training of trainers was completed in June 2003 to incorporate any needed changes that emerged during training. NFNC took the lead in finalizing the materials with other partners in Zambia.

Training of trainers of CHPs

In June 2003, eight trainers from NFNC, ZIHP, provincial, and district levels were trained by the project as trainers of trainers in CBGP. These trainers in turn trained 20 trainers from five districts as trainers of CHPs. ZIHP was to continue the training process by having the trainers of CHP train new groups of CHPs using the new training guides.

Review of CBGP activities in Zambia

All organizations known to be engaged in community-based growth promotion activities since 1998 were contacted to obtain information on the location of their CBGP activities. The organizations identified were ZIHP, CARE, PLAN, JICA, FAO, UNICEF, and DHMTs. Then one or two sites supported by each of these organizations were selected

and visited to gather information on the CBGP activities conducted at the sites. The selection of the sites included a mixture of urban and rural sites and allowed for the observation of a CBGP session during the assessment period. In all, 12 sites were visited in six districts (1–3 per district) in April/May 2003. Structured interview guides were used for mothers, health workers, CHPs and for observing CBGP sessions. Districts that were known to implement CBGP activities but which were not visited were sent questionnaires by mail for information on their CBGP activities, but no responses were received from five of the selected districts.

A qualitative review of CBGP activities was also conducted with NFNC participation but not with BASICS II funds. In May/June 2003, and then in August 2003, ZIHP hired a consultant to conduct a qualitative review of CBGP activities through observation, in-depth interviews, and focus group discussions among caregivers, CHPs, community leaders and health workers in three districts supported by ZIHP.

5. HIGHLIGHTS OF LESSONS LEARNED IN IMPLEMENTING CBGP IN ZAMBIA

- There is a demonstrated high level of support of CBGP by all key stakeholders, including the USAID-supported ZIHP, JICA, CARE, PLAN, FAO, UNICEF, Save the Children, health workers, and community members.

- In communities where there is frequent sharing of information with the community on the progress of the CBGP program (as was found in Kasama District), there is a strong sense of community ownership and the communities have devised their own ways of supporting the program and encouraging participation.

- CBGP programming is well suited to linking with other child health-related interventions, and as demonstrated in Zambia. In addition to counseling on feeding, some local programs promote or implement one or more of the following activities in during growth promotion sessions:
    - Immunization;
    - Promotion of the use of treated mosquito bed nets;
    - Promotion of use of locally-produced clorin for the treatment of drinking water;
    - Distribution of condoms for the prevention of STIs, including HIV;
    - Giving oral rehydration salt to children with diarrhea;
    - Education on good sanitation and hygiene;
    - Antenatal care and family planning;
    - Vitamin A supplementation;
    - Link with agriculture extension to encourage improved household food security through growing and preservation of staples and vegetables;
    - Backyard gardens;
    - Community nutrition clubs to support improved child nutrition; and
    - Using locally grown foods to prepare nutritious foods for children who are not growing well.

The CBGP program has also encountered some challenges described below.

- The lack of strong committed leadership in Zambia has left partners in some cases to replicate the CBGP program in directions that did not necessarily conform to the principles of the new approach. This is partly blamed on lack of resources available to NFNC to provide the necessary guidance to implementers. It would have been worth investing time and resources to build the capacity of the leaders at all levels at the time CBGP was introduced in Kitwe.

- Regular feedback to communities on the progress of the CBGP is lacking in some communities, which in turn leads to little support from the community leaders.

- It has been difficult to limit monthly weighing to children under two. This is probably partly due to the long-standing practice of encouraging all children under five to be taken for monthly weighing.

- There is some indication of inadequate support supervision by health workers evidenced either by infrequent visits to the communities, or not being effective when they do visit.

- Not having a presence in country made it difficult for BASICS II to maintain momentum at all times. While NFNC was a willing and interested partner and paid the salaries of employees working on the project-supported activities, it had competing responsibilities that sometimes took staff away on other assignments. Paying some of the salary of the person assigned to work with BASICS II would have given the project some legitimate claim on the person's time.

6. CONTRIBUTIONS OF ZAMBIA CBGP PROGRAM TO GLOBAL AND REGIONAL INITIATIVES

- The Zambia experience with CBGP has shown it to be an acceptable and adaptable strategy for delivering child nutrition and health services. It is a strategy that key stakeholders— donors, MOH policy-makers, health workers NGOs, communities, and child caregivers—are willing to adopt.

- The CBGP program is well suited to a decentralized health system, as it allows local innovation while maintaining its core principles.

- CBGP programming facilitates linkages with other promotive, preventive and curative interventions that have the potential to advance child health.

- Community-based growth promotion raises awareness within a community of the importance of growth as a manifestation of health status of a child. In Zambia, community members report that the CBGP program has helped dispel inappropriate notions and beliefs about child feeding.

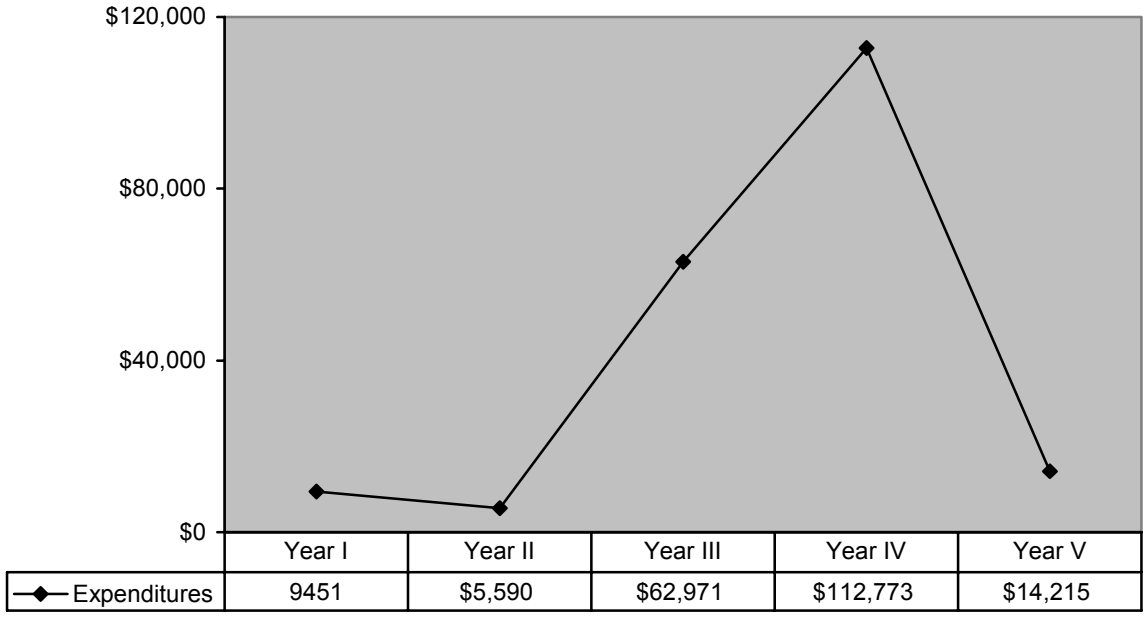
7. USAID INVESTMENTS THROUGH BASICS II IN ZAMBIA

BASICS II Zambia Program Expenditures
LIFE OF PROJECT BY FUNDING DIRECTIVE

Funding Directive	Field Support Zambia	Total BASICS II Zambia Program Expenditures
Child Survival	$205,000	**$205,000**
Total	**$205,000**	**$205,000**

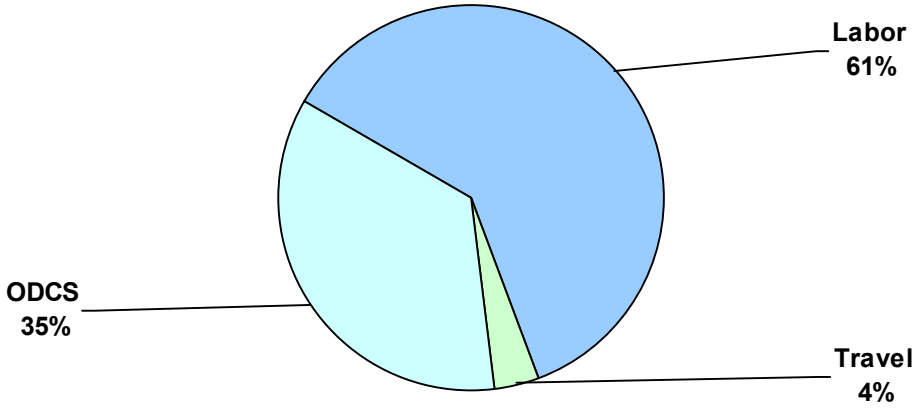
Total: $205,000

BASICS II Zambia Program Expenditures
LIFE OF PROJECT BY YEAR



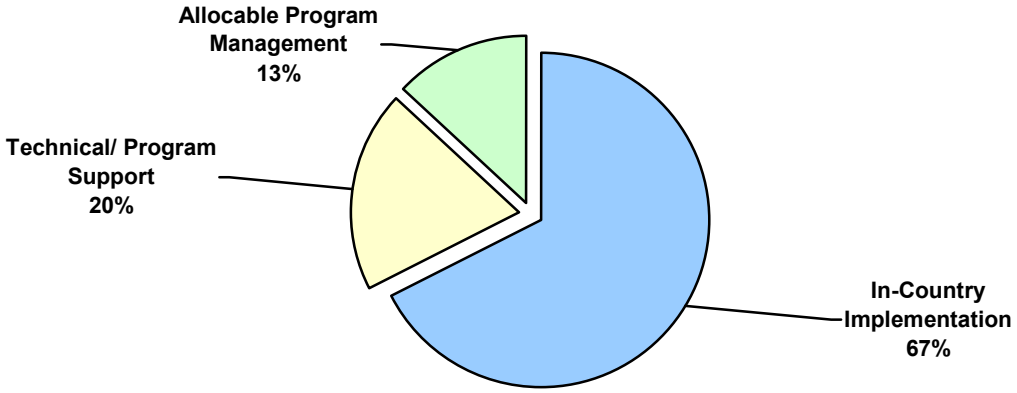
Total: $205,000

BASICS II Zambia Program Expenditures
LIFE OF PROJECT BY ACCOUNT CATEGORY



Total: $205,000

BASICS II Zambia Program Expenditures
ON IN-COUNTRY ACTIVITIES



Total: $205,000

BIBLIOGRAPHY

Bhat, G.J., J. Kabongo, F. Mubanga, R. Lungu. *Community Based Growth Monitoring and Promotion. Review of Activities in Luangwa, Mindolo and Ipusukilo Townships in Kitwe Distrcit, Zambia.*

Boggs, M., R. Lungu, P. Koni, Dec. 2003. *Community-Based Growth Promotion: Review of Program Implementation, Achievements and Lessons Learned from Kasama, Kitwe and Ndola, Zambia.*

Central Statistics Office. *Zambia Demographic and Health Survey 2001-2002.* Zambia.

Ministry of Health. 2000. *National Health Strategic Plan 2001-2005, MOH December 2000.* Zambia.

National Food and Nutrition Commission. 2003. *Report on the Inventory and Documentation of Community-based Growth Monitoring and Promotion in Zambia, April 24-July 2, 2003.* Zambia.

National Food and Nutrition Commission. 1984. Nutrition Surveillance (do it yourself) Kit. Zambia.

Pelletier D., Frongillo A., Habicht J. –P. 1993. Epidemiologic Evidence for a Potentiating Effect of Malnutrition on Child Mortality. *Am J Public Health* 83: 1130-1133.

Pelletier D. L. 1991. The Relationship Between Child Anthropometry and Mortality in Developing Countries: Implications for Policy, Programs and Future Research. *Cornell Food and Nutrition Policy Program, Monograph No. 12*, Ithaca, NY: Cornell University.

Sukin H et al., February 2003. *Analysis of Food Security, Health and Nutrition in Zambia*. (USAID Mission Report.)

The National Food and Nutrition Commission. *Objectives, Functions and Administrative Structure of the Commission*. Zambia

Materials Produced by BASICS II

- Manual for Community Child Health Promoters in Zambia
  A reference manual primarily for the CHPs but suitable also for health workers involved in CBGP. It is used in training; almost the entire manual is read during the training of both trainers and CHPs.

- Guide for Training the Trainers of Child Health Promoters

- Guide for Training Child Health Promoters

- Growth promotion counseling cards
  For use by CHPs during CBGP sessions to counsel caregivers on feeding and care of child.

- Promoting Adequate Growth in Zambian Children - Guidelines for Developing an Effective Growth Promotion Programme

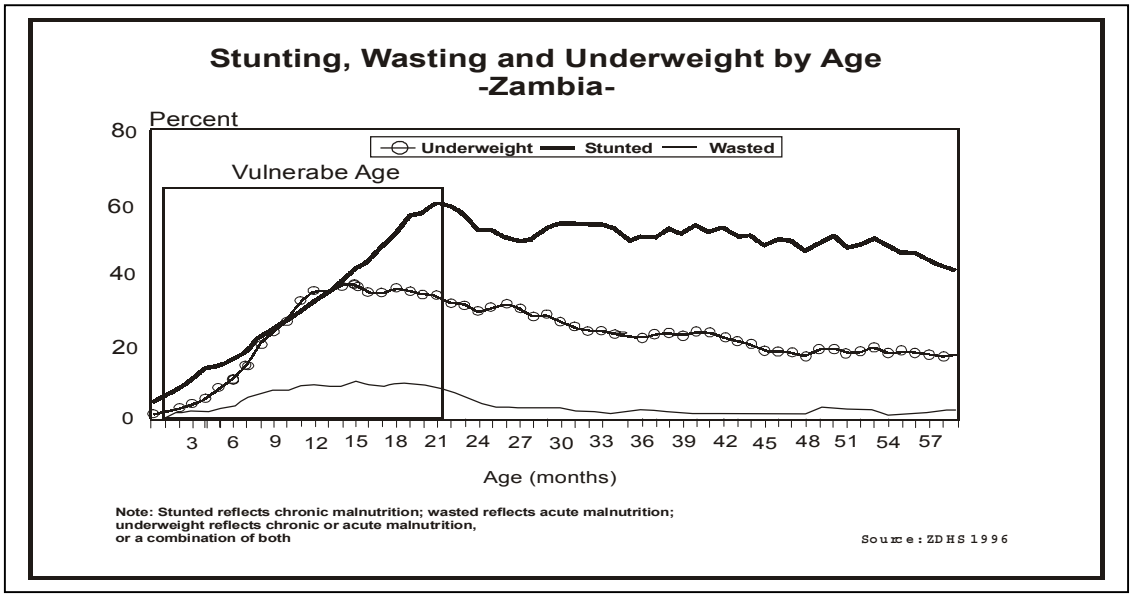
ANNEX 1: CBGP CHARACTERISTICS AND PLANNING AND BUDGETING INCLUDED IN 2004 DISTRICT PLANNING GUIDE

COMMUNITY-BASED GROWTH MONITORING AND PROMOTION

PLANNING AND STEPS TO IMPLEMENTATION

The Need for Growth Promotion Activities in Zambia

Most children in Zambia start life with an acceptable weight, but many do not grow as well as expected and become malnourished particularly during the first two years of life. Nutritional studies usually portray a picture shown below in terms of nutritional problems.



WHAT IS GROWTH PROMOTION?

Young children who are in good health and gain a certain amount of weight every month according to their own growth pattern. An early sign of nutrition or health problem is not gaining weight as expected. By monitoring their growth regularly it is possible to detect slowed growth early and take action to prevent more severe malnutrition, which is very difficult to treat.

Most of the mildly and moderately malnourished children do not have signs of malnutrition that are obvious to parents and may be missed even by health workers if they rely only on the child's physical appearance. Yet mild and moderate malnutrition also contribute to child deaths.

OBJECTIVES OF GROWTH PROMOTION PROGRAMMING

- To provide families with information on the growth of their individual children so they can take actions to maintain good growth and health or to improve the children's health when there is a problem**.**

- To provide communities with information on the health of their children in order to create a supportive climate for families to take appropriate actions, and stimulate community actions that can improve the health of the children.

WHAT DOES GROWTH PROMOTION INVOLVE?

- Regular weighing of children and plotting the weight on the growth chart
- Deciding whether or not the child has **adequate growth**
- Finding out about the child's health and feeding
- Using the information on the child's health, growth, and feeding to decide what to do
- Counseling on the care and feeding of the child
- Deciding on follow-up to find out how the child is responding to the actions taken
- Sharing information on the health of the children with the community

KEY CONCEPTS OF COMMUNITY-BASED GROWTH PROMOTION

CBGP is NOT simply taking the clinic-based activities into the community: It has some key concepts, even with local innovation

Old Approach to GMP	New Approach to Community-based GMP
Takes place in the health facility and outreach clinics	Takes place in the community by **teams** of community members based in the community
Activities are planned and carried out by health workers	Activities are planned by the community and carried by community volunteers
Emphasis on identifying malnourished children, the position of the child's weight on the growth chart	Emphasis on promoting **adequate growth,** and prevention of all degrees of malnutrition
Group counseling through health education	Counseling is tailored to individual child and family through negotiation
Monthly activity but most children are missed in monthly contacts	Monthly activity but being community based, efforts are made to weigh all eligible children who miss the monthly sessions

Targets children 0 up to 5 years	Targets the most vulnerable children 0 up to 2 years
Training serves mostly to share lots of information	Training concentrates on building SKILLS needed for the job
Information collected from program is to pass on to higher levels	Information collected is used to take action, beginning with the family and community
Reliance on food or technology for solution, often vertical programming	Focus on behavior change and integrated programming

WHY FOCUS ON CHILDREN UNDER TWO YEARS FOR *MONTHLY* WEIGHING AND COUNSELING

- Children younger than two years grow very fast; it is easier to detect slowed growth.
- Malnutrition develops most commonly during fist two years of life
- Impossible to counsel effectively all children under five because of large numbers
- CBGMP focus is prevention, and easier to take action at this time
- Children under two need special care and feeding

PLANNING COMMUNITY-BASED GROWTH PROMOTION ACTIVITIES

When a district or an NGO decides to implement CBGMP, adequate planning is crucial. Weighing scales are important but not the first and only item you need. Set time aside for planning and budget for it.

STEPS TO IMPLEMENTATION OF A COMMUNITY BASED GROWTH MONITORING AND PROMOTION PROGRAMME (CBGMP)

1. **Seek orientation for the DHMT/programme managers to the new concepts of CBGMP.**

   - Include in your plan and budget for someone knowledgeable about the new concepts of CBGMP to provide orientation for DHMT and OTHER relevant district persons. Seek help from NFNC if no one in your province or district has been oriented to the new concepts. REMEMBER: this is a new approach and needs orientation! Increase the chances of having positive programme impact.
   - Budget for the needed materials and planning activities

2. **Select your communities** according to criteria appropriate to the district. But make sure they are communities you can visit to provide support.

3. **Select a focal point person** who will be primarily responsible for coordinating and monitoring quality of the program.

4. **Ensure that routine monitoring indicators** for the activity are included in the existing supervisory instruments.

5. **Plan with the community.**

   - Sensitize the communities to the nature of CBGMP whether or not the request for CBGMP is coming from the community or results from PLA.
   - Explain what CBGMP is and what community can expect from it.
   - Explain and discuss why the focus on children under 2, and the goal of reaching each child younger than two once a month.
   - Discuss resource needs:
     - Explain the need for teams of volunteers. Plan to have a team of 3 or 4 growth promoters for every 30-40 children. If village or community is large discuss dividing it into sections with each section having a team.
     - Discuss criteria for selection of volunteers by the community.
     - Discuss volunteer incentives by community.
     - Need for venue.
     - Need for furniture – table and chairs.
     - Referral needs.
     - Mention also what resources the health service will provide.

6. **Before training, have needed resources in place.**

   - Confirm the availability of venue and furniture provided by the community.
   - Confirm the availability of teams of volunteers identified by communities.
   - Identify trainers (trained in CBGMP).
   - Gather needed supplies (TOT guides, Manual for Child Health Promoters (growth promoters), Guidelines for Implementing CBGMP, GMP counseling cards, Tally sheets, CBGMP Register, Monthly summary sheets, Table of Expected Minimum Weight Gain for children younger than 2 years, training supplies, weighing scales) CONTACT NFNC FOR THE MATERIALS.
   - Duplicate any materials that need duplication.
   - Organize training.
   - Have supervision plan in place.

7. **Training**

   - Conduct training for relevant trainers/supervisors.
   - Conduct training for the volunteer CHPs.

8. **Prepare for implementation.**

   - With trained CHPs, collect baseline information on all children under two in their community, their location, birthdates, birthweights, current weights.
   - Prepare CBGMP Register of all children younger than two.

9. Begin implementation.

- Begin CBGMP sessions a month after baseline, if possible.
- Provide close supportive supervision particularly in early months.
- Collect monthly information on growth of the children and adjust program accordingly.
- Assess performance of the programme 3 months after training of the promoters.

10. Organize periodic community feedback.

- Conduct meetings with community to share progress, discuss information on health and growth of the children and plan actions to solve problems and take action to promote better child health.

WHAT CBGMP OFFERS

- Growth promotion focuses on adequate growth, encourages action as soon as growth slows.
- CBGMP aims to prevent mild or moderate malnutrition, which is easier than treating severe malnutrition
- Focuses on the most vulnerable –children under 2 years for monthly contacts.
- Offers tailored, negotiated counseling for each child to reach agreement on what caregiver can do.
- Community receives feedback on the children's health. Can make decisions to shape the programme.
- A channel for linking child health interventions

SUMMARY TABLE OF KEY CBGMP RELATED ACTIVITIES TO BE PLANNED FOR BY PROVINCES, DISTRICTS, AND HEALTH CENTERS.

ACTIVITY	REQUIRED RESOURCES	DURATION	PARTNERS
CBGMP orientation for provincial, district and health center staff	Time Venue Staff CBGMP training pack	2 working days	CBOH, DHMT, NFNC, ZIHP, UNICEF
Planning with the community	Time Staff CBGMP instruments	3 days –in 3 visits	CBOH, DHMT, NFNC, ZIHP, UNICEF
Training of trainers/supervisors for Child health promoters. Include relevant health center staff.	Time Venue Staff Allowances CBGMP training pack	7 days (Including travel)	CBOH, DHMT, NFNC, ZIHP, UNICEF

Training of Child Health Promoters	Time Venue Staff Allowances CBGMP training pack	8 days (including travel)	CBOH, DHMT, NFNC, ZIHP, UNICEF
Initial Follow-up (3 months after training of CHPs)	Time Allowances Transport CBGMP supervisory checklist	Depends on the number of sites and CHPs trained. Important to have contact with all the CHPs.	CBOH, DHMT, NFNC, ZIHP, UNICEF
Monthly Supportive supervision by health center staff	Staff CBGMP supervisory checklist	Routine	CBOH, DHMT,
Refresher course for supervisors	Time Venue Staff Allowances CBGMP training pack Problems/issues	Once in a year	CBOH, DHMT,
Refresher course for CHPs	Time Venue Staff Allowances CBGMP training pack Problems/issues	Once in a year	CBOH, DHMT,
Intersectoral co-ordination meetings	Time Venue	Every 3 months for half a day.	CBOH, DHMT, ALL OTHER GOVT DEPARTMENTS, NGOs AND CBOs.

ANNEX 2: LIST OF 7 DISTRICTS AND COMMUNITIES CONDUCTING CBGP ACTIVITIES

(excludes ZIHP-supported districts)

Name of Health Centre	Name of Community	Total pop of Community	Pop Under 2 In Community	Year of Imple-mentation	Number of GP sites in the community	No. CHPs Trained	No. CHPs still at the post	GP site has a GP register	No. of GP sessions per month
Ndola - CARE/ Ndola District Health Management Team)									
Kabushi	Kabushi	19689	1575	1998	4	65	43	Y	4
Kavu	Kavu	14958	1197	1998	12	68	63	Y	8
Lubuto	Lubuto	42978	3438	1998	6	62	45	Y	6
Kawama	Kawama	16302	1304	1998	4	52	41	Y	4
Chipulukusu	Chipulukusu	32080	2566	1998	8	45	37	Y	7
Kaloko	Kaloko	10994	880	2001	5	50	50	Y	5
Kaniki	Kaniki	8250	660	2001	11	47	45	Y	11
Dola Hill	Dola Hill	8234	659	2001	5	42	40	Y	5
Mushli	Mushli	40318	3225	2001	12	55	53	Y	11
Ndeke	Ndeke	15407	1233	2001	7	52	52	Y	7
Twapia	Twapia	15678	1254	1998	8	52	28	Y	8
Pamodzi	Satuyasai	17962	1437	2001	7	55	54	Y	7
Bwafwano	Chifubu	42901	3432	2001	6	52	52	Y	6
New Masala	New Masala	25555	2044	1998	5	52	42	Y	6
Nkwazi	Nkwazi	20000	1600	1998	5	52	45	Y	8
Petauke - District Health Management Team									
Petauke	Kangagambwa	4000	320	2000	1	5	5	Y	4
Petauke	Lusowe	1500	120	2000	1	5	5	Y	3
Petauke	Kawere	3000	240	2000	1	5	1	Y	4
Petauke	Samalani	4500	360	2000	1	5	3	N	4
Petauke	Nseko	1500	120	2000	1	5	5	N	4
Petauke	Chilimanyama	1875	150	2000	1	5	5	Y	4
Nyamphande	Nyakocha	2500	200	2000	1	5	5	N	2
Nyamphande	Simwenda	1500	120	2000	1	5	5	N	2

Nyamphande	Nyamiya	4000	320	2000	1	5	5	N	2
Sinda	Kalole	3125	250	2000	1	5	4	N	2
Sinda	Nyamtuma	2775	222	2000	1	5	4	N	2
Sinda	Katema	2000	160	2000	1	5	5	N	2
Kalindawalo	Kalunguzya	2625	210	2000	1	5	5	N	2
Kalindawalo	Chitimba	2875	240	2000	1	5	5	N	2
Kalindawalo	Kazala	1500	230	2000	1	5	4	N	2
Matabazi	Kapungwe	1500	120	2000	1	5	4	Y	2
Matabazi	Chikalawa	3750	300	2000	1	5	4	Y	2
Matabazi	Mulera	3125	250	2000	1	5	3	N	2
Merwe	Matonga	3125	250	2000	1	5	5	N	2
Luaphande	Kabalibali	3625	290	2001	1	5	5	N	2
Luaphande	Foya	1500	120	2001	1	5	5	Y	2
Luaphande	Chitutanda	2000	160	2001	1	5	5	Y	2
Mumbi	Kasonde	1625	130	2001	1	5	5	N	2
Manyane	Matonga	3250	260	2001	1	5	5	N	2
Manyane	Chizanda	2800	220	2001	1	5	5	N	2
Manyane	Munkungwe	3750	300	2001	1	5	5	N	2
Chitaika	Chataika	2900	300	2001	1	5	5	N	2
Msazala	Simambubu	1750	140	2001	1	5	5	N	2
Chikuse	Mukonda	2000	160	2001	1	3	3	N	2
Mwanjabantu	Mwanjabantu	1750	140	2001	1	1	1	N	1
Sandwe	Sandwe	1000	80	2002	1	1	1	N	1
Chikowa	Chikonda	250	20	2002	1	1	1	N	1

Kitwe - CARE Kitwe, District Health Management Team

Zamtan	Zamtan	7058	565	1998	1	5	4	Y	8
Kanfisa	Kaloko	795	64	2001	1	5	4	Y	2
Luangwa	Luangwa	23943	1915	1998	4	21	20	Y	8
Ndeke	Mulenga	15000	2013	2001	2	10	10	Y	8
City Square	Mwaiseni	705	56	2001	1	6	2	Y	8
Ipusukilo	Ipusukilo	24223	407	1998	5	26	23	Y	8
Buchi	Buchi	600	75	2001	2	10	10	Y	8
Mindolo II	Mindolo II	9949	796	1998	2	10	3	Y	8
Mindolo I	Mindolo I	8837	707	1998	2	10	6	Y	8

Chimwemwe	Nakadoli	2500	347	2001	2	10	9	Y	8
Kawama	Kawama	-	-	2003	2	9	9	Y	8
Ganaton	Ganaton	539	85	2002	1	4	4	Y	8
COSETCO	Luango	408	47	2001	2	10	7	Y	4
Kasama - CARE Zambia									1
Kasama Urban	Kasama Urban	23008	4939	2002	9	52		Y	1
Kateshi	Kateshi	8107	1911	2002	10	37		Y	1
Location	Location	28629	8038	2002	14	81		Y	1
Lukashya	Lukashya	8117	1327	2002	6	29		Y	1
Milima	Milima	9066	1056	2002	8	25		Y	1
Misamfu	Misamfu	6726	1413	2002	7	28		Y	2
Musa	Musa	10602	2868	2002	9	32		Y	1
Mwamba	Mwamba	5352	535	2002	7	18		Y	1
Tazara	Tazara	30897	5104	2002	10	47		Y	1
ZNS Chishimba	ZNS Chishimba	3625	619	2002	6	19		Y	1
Chilubula	Chilubula	8730	2127	2002	7	37		Y	1
Lukupa	Lukupa	17160	2224	2002	13	44		Y	1
Lusaka - CARE Zambia									
Bauleni	Bauleni	52356	4188	2003	10	60		Y	10
Chainama	Chainama	29334	2347	1999	10	60		Y	10
Chainda	Chainda	30538	2443	1999	10	30		Y	10
Chawama	Chawama	68515	5481	1999	10	94		Y	10
Chelstone	Chelstone	67183	5375	1999	10	38		Y	10
Chilenje	Chilenje	79650	6372	1999	10	33		Y	10
Chipata	Chipata	84438	6755	1999	10	38		Y	10
Garden Post	Garden Post	55000	4400	2003	10	29		Y	10
George	George	99248	7940	1999	10	54		Y	10
Kabwata	Kabwata	62549	5004	2003	10	28		Y	10
Kalingaliga	Kalingaliga	46570	3726	2003	10	49		Y	10
Kamwala	Kamwala	54968	4397	2003	10	73		Y	10
Kayama	Kayama	114398	9152	1999	10	89		Y	10
Kaunda Square	Kaunda Square	29434	2355	2003	10	60		Y	10

Lilayi	Lilayi	17827	1426	2003	10	35		Y	10
Mandevu	Mandevu	78459	6277	2003	10	52		Y	10
Matero Main	Matero Main	67183	5375	2003	10	50		Y	10
Matero Ref	Matero Ref	61076	4886	1999	10	48		Y	10
Mtendere	Mtendere	58022	4642	1999	10	89		Y	10
State Lodge	State Lodge	3584	287	2003	10	31		Y	10
Total									
Lusaka - JICA, District Health Management Team									
Total George		138450	9557	1998	19	100	80	Y	19
George	lilanda								
George	kizito								
George	desai								
George	chikolokoso								
George	soweto								
George	lillanda site								
Ngombe	ngombe	30155	1803	1998	10	25	13	N	10
Total Kanyama	chinika	114398	7378	2000	11	89	50	N	11
Kanyama	chibolya								
Kanyama	kanyama site and service								
Kanyama	new Kanyama								
Kanyama	old kanyama								
Total Chawama		68515	4419	2000	10	94	70	N	40
Chawama	old Chawama								
Chawama	new Chawama								
Chawama	komboka								
Chawama	kuku								
Chawama	jack/misisi								
Chawama	jonhlaing								
Total Chipata		117900	7663	2001	13	66	40	N	13
Chipata	garden								
Chipata	chaisa								
Chipata	marapodi								
Chipata	chipata								

Chipata	magyopa									
Chipata	chazamga									
Chipata	kabanana									
Total Mtendere			78874	5126	2001	6	104	59	Y	24
Mtendere	mtendere									
Mtendere	kalikiliki									
Mtendere	ibex hill									
Mazabuka - PLAN Zambia										
Namembo	Namembo		19000	1520	2002	9	6	6	Y	4
Chikolwe	Ngangula		12000	960	2002	4	10	8	Y	4
Lubano	Lubano		9000	720	2002	10	10	0	N/A	N/A
Kaleya	Kaleya		15000	2000	2002	5	10	10	Y	5
Nansenga	Nansenga		15110	2500	2002	6	12	6	Y	8
Nadezwe	Nadezwe		10000	800	2002	4	10	0	N/A	N/A
Ndeke	Ndeke		12500	1000	2002	10	10	5	Y	5
Naluama	Naluama		8060	-	2002	4	0	0	N/A	4
Neganega	Neganega		11120	890	2002	10	0	0	N/A	N/A
Katete - District Health Management Team										
Kafumbwe	Kaliula		2713	217	2001	1	5	5	Y	1
Kafumbwe	Kazule		2850	228	2000	1	5	5	Y	1
Kafumbwe	Lunga		2938	235	2000	1	5	5	Y	1
Mugomba	Matsita		1163	93	2000	1	5	-	Y	1
Mugomba	Kapangila	-	-		2000	1	-		Y	1
Mugomba	Chigula	-	-		2000	1	-		Y	1
Tilewe	Mphedo		1013	81	2000	1	-		Y	1
Tilewe	Biani	-	-		2000	1	5	-	Y	1
Tilewe	Chalapura	-	-		2000	1	-		Y	1
Nyaluwiro	Senjere		1350	108	2000	1	-		Y	1
Nyaluwiro	Jeremia	-	-		2000	1	5	-	Y	1
Nyaluwiro	Jastone	-	-		2000	1	-		Y	1
Vulamuoko	Keni		18763	1501	2000	1	-		Y	1
Vulamuoko	Reuben	-	-		2000	1	5	-	Y	1

Vulamuoko	Oliver	-	-		2000	1	-	-	Y	1
Kapemba	Iosasch	-	-		2000	1	-	-	Y	1
Kapemba	Kapea Farm	-	-		2000	1	5	5	Y	1
Chinjoza	Nyamauro	-	-		2000	1	5	5	Y	1
Chinjoza	Nyambubira	-	-		2000	1	5	5	Y	1
Chinjoza	Abelo	-	-		2000	1	5	5	Y	1
Kamiza	Maozi		1288	103	2000	1	5	5	Y	1
Kamiza	Magobo		1088	87	2000	1	5	5	Y	1
Kamiza	Timbala		1138	91	2000	1	5	5	Y	1
Mtandaza	Herooe		12050	964	2000	1	-	-	Y	1
Mtandaza	Mgalilondo	-	-		2000	1	-	-	Y	1
Mtandaza	Laeni	-	-		2000	1	5	5	Y	1
Mtandaza	Kapuumba	-	-		2000	1	-	-	Y	1
Mtandaza	Chimsimbe	-	-		2000	1	5	5	Y	1
Mtandaza	Kamepa	-	-		2000	1	-	-	Y	1
Mtandaza	Chizule	-	-		2000	1	-	-	Y	1

Monze - District Health Management Team

Luyaba	Hammwiiba	592	53	2000	1	4	3	Y	2
	Chuuka	651	58	2000	1	4	4	Y	2
	Moomba	821	69	2000	1	5	3	Y	2
Nampeyo	Kayola	1200	97	2000	1	4	4	Y	2
	Habukuya	970	100	2000	1	5	4	Y	2
	Namateba	883	89	2000	1	4	4	Y	2
Njola Mwanza	Ntambo	2500	193	2000	1	5	5	Y	2
	Nkaba	2300	150	2000	1	5	5	Y	2
	Mwanza	1600	210	2000	1	5	4	Y	2
Bweengwa	Mooya	1800	89	2000	1	5	5	Y	2
	Nalutanda	2000	101	2000	1	5	4	Y	2
	Mutanzi	4150	354	2000	1	4	3	Y	2
Moomba	Hagumba	487	56	2000	1	3	3	Y	2

	Simwaalu	960	101	2000	1	3	2	Y	2
	Chitama	870	87	2000	1	3	3	Y	2
Total		21784	1807	2000	1	64	56	Y	2